

# Maharashtra Board

## Class-VI Mathematics

### Sample Paper-1

Time: 2 hrs

Total Marks: 60

#### General Instructions:

1. All questions are **compulsory**.
2. The question paper consists of **29** questions divided into **five sections** A, B, C, D and E. **Section A** comprises **12** questions of 1 mark each, **Section B** comprises 8 questions of 2 marks each, **Section C** comprises 5 questions of 3 marks each, **Section D** comprises 3 questions of 4 marks each and **Section E** comprises 1 question of 5 marks.
3. Question numbers **1 to 12** in **Section A** are multiple choice questions where you are to select **one** correct option out of the given four.
4. There is no overall choice. However, internal choice has been provided in **2** questions of **three marks** each, **1 question** of **four marks** and **1 question** of **five marks**. You have to attempt only one of the alternatives in all such questions.
5. Use of a calculator is **not** permitted.

#### SECTION - A

1. If the number can be divided by the numbers 2 and 3, then that number is divisible by \_\_\_\_.  
(A) 6  
(B) 9  
(C) 11  
(D) 5
2. \_\_\_\_ passes through any two given points.  
(A) Two line  
(B) One and only one line  
(C) No line  
(D) Innumerable lines
3. Lines in the same plane which do not intersect each other are \_\_\_\_.  
(A) Concurrent lines  
(B) Straight lines  
(C) Parallel lines  
(D) Line segments

4. A right angle measures \_\_\_\_.
- (A)  $60^\circ$
  - (B)  $120^\circ$
  - (C)  $180^\circ$
  - (D)  $90^\circ$
5. The measures of angles in a pair of vertically opposite angles are always \_\_\_\_.
- (A) equal
  - (B) different
  - (C) supplementary
  - (D) complementary
6. The smallest whole number is \_\_\_\_.
- (A) 1
  - (B) 0
  - (C) 4
  - (D) 2
7. The amount at which a thing is bought is called its \_\_\_\_.
- (A) cost price
  - (B) selling price
  - (C) profit
  - (D) loss
8. The perimeter of a square with sides of 12 cm is
- (A) 24 cm
  - (B) 12 cm
  - (C) 48 cm
  - (D) 36 cm
9. The expressions having only one term are called as \_\_\_\_.
- (A) binomial
  - (B) trinomial
  - (C) coefficient
  - (D) monomials
10. At the time of returning the loan to the bank or credit society, we have to pay back an amount somewhat bigger than the loan. This additional amount is called \_\_\_\_.
- (A) simple interest
  - (B) principal
  - (C) period
  - (D) rate of interest

11. If the lengths of all the three sides of a triangle are equal, the triangle is called\_\_\_\_\_.

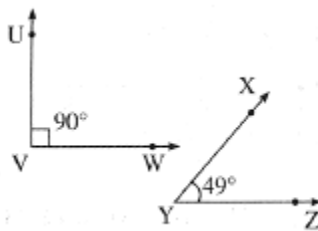
- (A) an isosceles triangle
- (B) an equilateral triangle
- (C) a scalene triangle
- (D) a right-angled triangle

12. The sum of the measures of the three angles of any triangle is\_\_\_\_\_.

- (A)  $60^\circ$
- (B)  $120^\circ$
- (C)  $180^\circ$
- (D)  $90^\circ$

### SECTION - B

13. Name the bigger angle in the pair.



14. Which number is neither prime nor composite?

15. Find the perimeter of a triangle whose sides are 6 cm, 9 cm and 5 cm.

16. Subtract:  $49 - 14$

17. Simplify:  $4 \times [10 + (-12)]$

18. In the following equation is the number given in brackets the solution of the equation?

$$5 = \frac{35}{x} \quad [7]$$

19. Convert the following fraction into percentage:  $\frac{43}{50}$

20. Multiply:  $105 \times 105$

### SECTION - C

21. The ratio of the number of cows to buffaloes which Kondajianna owns is 3:7. If he owns 28 buffaloes, what is the number of cows he has?
22. If Kaustubh buys 96 kg of sugar at Rs 17 per kg and sells it at 18.50 per kg, how much profit will he make?

**OR**

$\angle ACD$  is an exterior angle of  $\triangle ABC$ . The measures of  $\angle A$  and  $\angle B$  are equal. If  $m\angle ACD = 140^\circ$ , find the measure of  $\angle A$  and  $\angle B$ .

23. Use the divisibility tests to determine whether the number 378 is divisible by 2, 3, 4, 5, 6, 9 or 11.
24. The perimeter of a rectangular pool is 100 m and its length is 30 m. Find its breadth.

**OR**

Subtract the following algebraic expression in both horizontal and vertical arrangement.

$$(11x^2 + 12y) - (9x^2 - 7y)$$

25. During Diwali, 75 of 625 mail collected from a post box were greeting cards. What percentage of the mail were greeting cards?

### SECTION - D

26. Carry out the following division:

$$2615.13 \div 9$$

**OR**

In each of the following examples, write the ratio of the first number to the second and also of the second number to the first.

(Use the ratio symbol)

No	First Number	Second Number	Ratio of the first no. to the second no.	Answer	Ratio of the second no to the first no.	Answer
(1)	10	9				
(2)	7	22				
(3)	2	5				
(4)	7	11				
(5)	13	17				

27. Azim bought 40 kg brinjals at the rate of Rs 6 per kilogram. He sold 25 kg of them at Rs 8 per kg and the rest at Rs 6 per kg. Did he have a profit or a loss? How much?

**28.**In an assembly hall 25 m long and 15 m broad, a platform 10 m long and 4 m broad has been built on one side. Find the area of the hall excluding the platform.

**SECTION - E**

**29.**A wire is bent into a rectangle of length 50 cm and breadth 30 cm. If the wire were straightened and then bent into a square, how many centimetres would each of its sides measure?

**OR**

A wall 4 m long, 3 m high and 0.4 m thick is to be built. How many bricks 20 cm long, 12 cm broad and 10 cm thick will be required?